

West Virginia Department of Environmental Protection
Division of Air Quality

Joe Manchin, III
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
CYTEC Industries Inc.
Willow Island Plant
Site Services (3 of 4)
R30-07300003-2009

John A. Benedict
Director

Issued: October 27, 2009 • Effective: November 10, 2009
Expiration: October 27, 2014 • Renewal Application Due: April 27, 2014

Permit Number: **R30-07300003-2009**
Permittee: **CYTEC Industries Inc.**
Facility Name: **Willow Island Plant**
Manufacturing Unit: **Site Services (Part 3 of 4)**
Permittee Mailing Address: **#1 Heilman Avenue, Willow Island, WV 26134-9801**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Willow Island, Pleasants County, West Virginia
Telephone Number:	(304) 665-3485
Type of Business Entity:	Corporation
Facility Description:	Powerhouse, Wastewater Treatment, and Laboratories
SIC Codes:	2869 (primary), 2843 (secondary), 2899 (tertiary)
UTM Coordinates:	474.00 km Easting • 4,356.00 km Northing • Zone 17

Permit Writer: Carrie McCumbers

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0	Emission Units and Active R13, R14, and R19 Permits	4
1.1.	Emission Units	4
1.2.	Active R13, R14, and R19 Permits	5
2.0	General Conditions.....	6
2.1.	Definitions	6
2.2.	Acronyms.....	6
2.3.	Permit Expiration and Renewal	7
2.4.	Permit Actions	7
2.5.	Reopening for Cause.....	7
2.6.	Administrative Permit Amendments	8
2.7.	Minor Permit Modifications	8
2.8.	Significant Permit Modification.....	8
2.9.	Emissions Trading	8
2.10.	Off-Permit Changes	8
2.11.	Operational Flexibility	9
2.12.	Reasonably Anticipated Operating Scenarios	10
2.13.	Duty to Comply.....	10
2.14.	Inspection and Entry	10
2.15.	Schedule of Compliance	11
2.16.	Need to Halt or Reduce Activity not a Defense	11
2.17.	Emergency	11
2.18.	Federally-Enforceable Requirements.....	12
2.19.	Duty to Provide Information	12
2.20.	Duty to Supplement and Correct Information	12
2.21.	Permit Shield	13
2.22.	Credible Evidence.....	13
2.23.	Severability	13
2.24.	Property Rights	13
2.25.	Acid Deposition Control.....	13
3.0	Facility-Wide Requirements	15
3.1.	Limitations and Standards.....	15
3.2.	Monitoring Requirements	16
3.3.	Testing Requirements	16
3.4.	Recordkeeping Requirements	17
3.5.	Reporting Requirements	17
3.6.	Compliance Plan.....	19
3.7.	Permit Shield	19
4.0	Source-Specific Requirements [Wastewater Treatment Plant]	22
4.1.	Limitations and Standards.....	22
4.2.	Monitoring Requirements	22
4.3.	Testing Requirements	22
4.4.	Recordkeeping Requirements	22
4.5.	Reporting Requirements	22
4.6.	Compliance Plan.....	22
5.0	Source-Specific Requirements [Equalization/Neutralization Unit (226X and 226Y)]	23

5.1.	Limitations and Standards.....	23
5.2.	Monitoring Requirements	24
5.3.	Testing Requirements	24
5.4.	Recordkeeping Requirements	24
5.5.	Reporting Requirements	25
5.6.	Compliance Plan	25
6.0	Source-Specific Requirements [Boilers 830X and 831X]	26
6.1.	Limitations and Standards.....	26
6.2.	Monitoring Requirements	27
6.3.	Testing Requirements	28
6.4.	Recordkeeping Requirements	28
6.5.	Reporting Requirements	29
6.6.	Compliance Plan	29
7.0	Source-Specific Requirements [Emergency Diesel Engines E02E, E03E, E04E].....	30
7.1	Limitations and Standards.....	30
7.2.	Monitoring Requirements.....	31
7.3.	Testing Requirements.....	32
7.4.	Recordkeeping Requirements.....	32
7.5.	Reporting Requirements.....	32
7.6.	Compliance Plan	32

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
65WW	Open to atmosphere	On-Site Biological Wastewater Treatment System	1973 - 1992	9,000,000 GPD	None
226X	226E	E/N Tank C	1994	31,000 Gallons	Scrubbers 226C/226D
226Y	226E	E/N Tank B	1994	31,000 Gallons	Scrubbers 226C/226D
830X	830E	Boiler #A	2004	97.9 MMBTU/hr (Natural Gas) 93.6 MMBTU/hr (Distillate Oil)	None
831X	831E	Boiler #B	2004	97.9 MMBTU/hr (Natural Gas) 93.6 MMBTU/hr (Distillate Oil)	None
T83-F01	T83-EM1	Distillate Fuel Oil Storage Tank	2004	12,000 Gallons	None
65BL	65V05	<u>Emergency Diesel Engine (Stationary Generator) – Bldg. 65</u>	1988	355 hp	None
<u>E04E</u> E01E	<u>E04P</u> E01P	Emergency Diesel Engine (Stationary Fire Pump) – Bldg. 97	<u>2010</u> 1971	<u>175 hp</u> 220 hp	None
E02E	E02P	Emergency Diesel Engine (Stationary Fire Pump) – Bldg. 95	1989	220 hp	None
E03E	E03P	Emergency Diesel Engine (Stationary Fire Pump) – Bldg. 95	1989	220 hp	None

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0936B	June 11, 2009
R13-2560E	September 18, 2006

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NO_x	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance
CEM	Continuous Emission Monitor		Standards
CES	Certified Emission Statement	PM	Particulate Matter
C.F.R. or CFR	Code of Federal Regulations	PM₁₀	Particulate Matter less than
CO	Carbon Monoxide		10µm in diameter
C.S.R. or CSR	Codes of State Rules	pph	Pounds per Hour
DAQ	Division of Air Quality	ppm	Parts per Million
DEP	Department of Environmental Protection	PSD	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP		
HP	Horsepower	SIP	State Implementation Plan
lbs/hr or lb/hr	Pounds per Hour	SO₂	Sulfur Dioxide
LDAR	Leak Detection and Repair	TAP	Toxic Air Pollutant
m	Thousand	TPY	Tons per Year
MACT	Maximum Achievable Control Technology	TRS	Total Reduced Sulfur
		TSP	Total Suspended Particulate
mm	Million	USEPA	United States Environmental Protection Agency
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour	UTM	Universal Transverse Mercator
NA or N/A	Not Applicable	VEE	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality Standards	VOC	Volatile Organic Compounds
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
- b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
- c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.
- [40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** This stationary source, as defined in 40 C.F.R. § 68.3, is subject to Part 68. This stationary source shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. Part 68.10. This stationary source shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

3.2. Monitoring Requirements

- 3.2.1. None.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

[WV Code § 22-5-4(a)(15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
- a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-0936, 3.4.1; 45CSR13, R13-2560, 4.4.1]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3-APD-Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]
- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]
- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.
- 3.5.8. **Deviations.**
- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

- 3.6.1. None.

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
 - a. 40 C.F.R. 60, Subpart K – “Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.” There are no petroleum liquid storage tanks in the Site Services area constructed within the applicable dates with a design capacity greater than 40,000 gallons.

- b. 40 C.F.R. 60, Subpart Ka – “Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 19, 1978, and Prior to July 23, 1984.” There are no petroleum liquid storage tanks in the Site Services area constructed within the applicable dates with a design capacity greater than 40,000 gallons.
- c. 40 C.F.R. 60, Subpart Kb – “Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.” There are no volatile organic liquid storage tanks in the Site Services area constructed after July 23, 1984 with a design capacity equal to or greater than 75 cubic meters (m³).
- d. 40 C.F.R. 60, Subpart VV - “Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.” The Site Services area does not produce as intermediates or final products any of the materials listed in 40 C.F.R. §60.489.
- e. 40 C.F.R. 60, Subpart DDD – “Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry.” The Site Services area does not manufacture polypropylene, polyethylene, polystyrene, or poly(ethylene terephthalate) for which this rule applies.
- f. 40 C.F.R. 60, Subpart III – “Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes.” The Site Services area does not produce any of the chemicals listed in 40 C.F.R. §60.617 as a product, co-product, by-product, or intermediate.
- g. 40 C.F.R. 60, Subpart NNN – “Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.” The Site Services area does not produce any of the chemicals listed in 40 C.F.R. §60.667 as a product, co-product, by-product, or intermediate.
- h. 40 C.F.R. 60, Subpart RRR - “Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.” The Site Services area does not produce any of the chemicals listed in 40 C.F.R. §60.707 as a product, co-product, by-product, or intermediate.
- i. 40 C.F.R. 61, Subpart V – “National Emission Standards for Equipment Leaks (Fugitive Emissions Sources).” Applies to sources in VHAP service as defined in 40 C.F.R. §61.241. VHAP service involves chemicals that are not used in a manner that qualifies them under the rule in the Site Services Area.
- j. 40 C.F.R. 63, Subparts F, G, and H – “National Emission standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (HON).” 40 C.F.R. 63, Subparts F, G, and H do not apply to manufacturing process units that do not meet the criteria in 40 C.F.R. §§63.100(b)(1), (b)(2), and (b)(3). The equipment subject to this permit is not an “affected facility,” because such equipment does not manufacture as a primary product any chemical listed in Table 1 of 40 C.F.R. 63, Subpart F.

- k. 40 C.F.R. 63, Subpart DD – “National Emission Standards for Hazardous Air Pollutants From Off-Site Waste and Recovery Operations.” The Site Services area does not receive off-site materials as specified in paragraph 40 C.F.R. §63.680(b) and the operations are not one of the waste management operations or recovery operations as specified in 40 C.F.R. §§63.680(a)(2)(i) through (a)(2)(vi).
- l. 40 C.F.R. 63, Subpart JJJ – “National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins.” The Site Services area does not produce the materials listed in 40 C.F.R. §63.1310.
- m. 40 C.F.R. 63, Subpart PPPP – “National Emission standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products.” The Site Services area does not produce an intermediate or final product that meets the definition of “surface coated” plastic part.
- n. 40 C.F.R. 63, Subpart WWW – “National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production.” The Site Services area does not engage in reinforced plastics composites production as defined in 40 C.F.R. §63.5785 and does not manufacture composite material as defined in 40 C.F.R. §63.5935.
- o. 40 C.F.R. 64 – “Compliance Assurance Monitoring.” Per 40 C.F.R. §64.2(a)(3), emission point 226E is not subject to the CAM Rule because pre-control device emissions are less than 10 tons per year of single HAP.
- p. 45CSR17 – “To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter.” Per 45CSR§17-6.1, CYTEC is not subject to 45CSR17 because the Willow Island Plant is subject to the fugitive particulate matter emission requirements of 45CSR7.
- q. 45CSR27 – “To Prevent and Control the Emissions of Toxic Air Pollutants.” Since the potential emissions to the atmosphere from all sources (point, fugitive, and secondary) at CYTEC’s Willow Island Plant are less than 1,000 lb/yr of formaldehyde, less than 1,000 lb/yr of benzene, and less than 500 lb/yr of acrylonitrile, emission units at the plant are no longer subject to the BAT requirements under 45CSR27, per section 45CSR§27-3.1. Also, per 45CSR§27-3.1, emission units at the plant that emit formaldehyde and benzene would no longer be subject to the BAT requirements of 45CSR27 because the formaldehyde emitting sources are now subject to the requirements of 40 C.F.R. 63, Subpart FFFF and the benzene emitting sources are now subject to the requirements of 40 C.F.R. 63, Subpart GGGG. Site-wide potential to emit for acrylonitrile is zero because the single process which formerly utilized acrylonitrile was shut down and all equipment was dismantled in 2008.

For the above reasons, the benzene and formaldehyde emission limitations and requirements of R30-10700003-2009 (Part 3 of 4) and R30-10700003-2002 (Part 4 of 5) shall supersede and replace the requirements of Consent Order CO-R27-C-2000-27.

4.0 Source-Specific Requirements [Wastewater Treatment Plant]

4.1. Limitations and Standards

- 4.1.1. The benzene groundwater pumping activity in the Wastewater Treatment Plant has been determined to be subject to only the recordkeeping requirements in 40 C.F.R. §63.7881(c) of 40 C.F.R. 63, Subpart GGGGG – “National Emission Standards for Hazardous Air Pollutants: Site Remediation.” Should the benzene groundwater pumping activity in the Wastewater Treatment Plant become subject to additional requirements of 40 C.F.R. 63, Subpart GGGGG, the permittee shall comply with all applicable requirements in accordance with 40 C.F.R. 63, Subpart GGGGG. The Site Remediation MACT includes requirements to limit Hazardous Air Pollutant (HAP) emissions from site remediation activities including from process vents, remediation material management units and equipment leaks as applicable. The Site Remediation MACT also includes specific notification, testing, monitoring, recordkeeping, and reporting requirements. After submittal of any notification of compliance status report required by 40 C.F.R. §63.7950(e), the permittee shall also submit a complete Title V application for a significant modification to the facility’s Title V Operating Permit. **[45CSR34; 40 C.F.R. §63.7881(c); 45CSR§30-6.5.b.2]**

4.2. Monitoring Requirements

- 4.2.1. None.

4.3. Testing Requirements

- 4.3.1. None.

4.4. Recordkeeping Requirements

- 4.4.1. To demonstrate compliance with Section 4.1.1 and 40 C.F.R. 63, Subpart GGGGG for the benzene groundwater pumping activity, the permittee shall maintain at its facility written documentation required by 40 C.F.R. §63.7881(c) to support the facility’s determination that the total quantity of the HAP listed in Table 1 of 40 C.F.R. 63, Subpart GGGGG that is contained in the remediation materials excavated, extracted, pumped, or otherwise removed during all of the site remediations conducted at the facility is less than 1 megagram (Mg) annually. This documentation shall include a description of the methodology and the data used for determining the total Table 1 HAP content of the remediation material, and shall be maintained for a period of at least five (5) years from the date of record generation. These records shall be made available for review within a reasonable time upon the request of the Director or his/her authorized representative. **[45CSR34; 40 C.F.R. §63.7881(c); 45CSR§30-5.1.c.]**

4.5. Reporting Requirements

- 4.5.1. None.

4.6. Compliance Plan

- 4.6.1. None.

5.0 Source-Specific Requirements [Equalization/Neutralization Unit (226X and 226Y)]

5.1. Limitations and Standards

- 5.1.1. Maximum allowable hourly and annual emissions from the Equalization/Neutralization Emission Unit process vent, emission point 226E, shall not exceed the limitations set forth in Table 5.1.1.

Table 5.1.1. Emission Limits for E/N Emission Unit Process Vent

Pollutant	Emission Limit	
	pph	tpy
VOC	21.5	5.20
THAP	21.5	1.50
Formaldehyde	0.5	0.005

[45CSR13, R13-0936, 4.1.1]

- 5.1.2. If the permittee emits any HAP other than those listed in Table 5.1.2 from the Equalization/Neutralization Emission Unit process vent (emission point 226E), at an estimated annual emission rate of 50 ppy (pounds per year) or greater, the permittee shall provide written notification to the Director within thirty (30) days after beginning or discovering such emissions. This written notification shall include the potential to emit (in pph and tpy) for each new HAP species from the E/N Emission Unit. The permittee shall not exceed the THAP emission limits set forth in 5.1.1 unless this permit has been duly amended or modified to allow such increased emissions.

Table 5.1.2. Hazardous Air Pollutants Emitted from E/N Emission Unit Process Vent

Pollutant	CAS	TAP?
Acetaldehyde	75-07-0	No
Acrylic Acid	79-10-7	No
Benzotrichloride	98-07-7	No
Dimethyl Formamide	68-12-2	No
Dimethyl Sulfate	77-78-1	No
Ethylbenzene	100-41-4	No
Formaldehyde	50-00-0	Yes ¹
Hydrochloric Acid	7647-01-0	No
Hydroquinone	123-31-9	No
Methanol	67-56-1	No
Methyl Isobutyl Ketone	108-10-1	No
Toluene	108-88-3	No
2, 4 - Toluene Diisocyanate	584-84-9	No
Triethylamine	121-44-8	No
Xylenes (isomers & mixtures)	1330-20-7	No

¹Sitewide potential formaldehyde emissions do not exceed Rule 13 Table 45-13A or Rule 27 BAT thresholds.

[45CSR13, R13-0936, 4.1.2]

5.1.3. While the E/N Process is venting, emissions from the E/N Process shall be vented to either or both of the E/N Scrubbers (equipment ID No. 226C and 226D). While an E/N Scrubber is in operation, the scrubbing liquor flow rate to the packed tower shall be maintained at 3 gpm or greater based on a calendar daily average. **[45CSR13, R13-0936, 4.1.3]**

5.1.4. **Maintenance of Air Pollution Control Equipment.** The permittee shall install, operate, and maintain all pollution control equipment in accordance with the manufacturer's specifications so as to provide the guaranteed minimum control efficiency or with any more stringent control requirements as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. **[45CSR13, R13-0936, 3.1.8; 45CSR§13-5.11]**

5.2. Monitoring Requirements

5.2.1. While the E/N Scrubber is in operation, the scrubbing liquor flow rate shall be monitored and recorded in the following manner:

- a. Electronic data logging of flow rate at least once every six hours; or
- b. Manual data logging on a log sheet a minimum of every six hours.

[45CSR13, R13-0936, 4.2.1]

5.2.2. A flow switch will be used to monitor flow in the scrubbing liquor feed line for the E/N Scrubbers, while the E/N Process is venting. An alarm will be used to indicate a loss of flow condition. In the event of an alarm, an operator will investigate and correct the condition or switch emissions flow to the alternate E/N Scrubber. A record will be maintained of loss of flow events and the actions taken to remedy the condition. **[45CSR13, R13-0936, 4.2.2.]**

5.3. Testing Requirements

5.3.1. None.

5.4. Recordkeeping Requirements

5.4.1. The permittee will maintain records of monitoring required by sections 5.2.1 and 5.2.2 for the primary and spare E/N Scrubbers. The scrubbing liquor flow rate recordkeeping should include, at a minimum, the time and date of the measurement, the scrubbing liquor flow rate in gallons per minute, and the equipment identification number for the E/N Scrubber being monitored. The alarm event log should include, at a minimum, the time and date of the alarm, the equipment identification number for the E/N Scrubber that triggered the alarm, a brief description of the loss of flow event, and the actions taken to remedy the condition. **[45CSR13, R13-0936, 4.4.1]**

5.4.2. Record of Maintenance of Air Pollution Control Equipment.

- a. The permittee shall maintain maintenance records relating to the failure and/or repair of air pollution control devices and fugitive emissions control systems. Such records shall contain, at a minimum, the equipment ID number, a brief description of the equipment, the date of failure and/or repair, the nature of the problem, actions taken, and the name or initials of the person making the record entry. In the event of air pollution control equipment, fugitive emissions control system, or system failure, these records shall document the permittee's effort to maintain proper and effective operation of such equipment and/or systems.
- b. Air pollution control equipment maintenance records shall be retained on-site for a period of five (5) years. Certified records, signed by a Responsible Official or an Authorized Representative shall be made available to the Secretary or a duly authorized representative upon request; and
- c. Maintenance records required by this section may be kept in electronic format. The document(s) shall be printed and certified by a Responsible Official or Authorized Representative upon request.

[45CSR13, R13-0936, 3.4.2.]

5.5. Reporting Requirements

- 5.5.1. The emission to the air of any TAP resulting from an abnormal release or spill in excess of the following amounts shall be reported to the Director or his authorized representative not later than 24-hours after the permittee has knowledge of such emission:
 - For ethylene oxide and vinyl chloride, one (1) pound;
 - For acrylonitrile and butadiene, ten (10) pounds;
 - For all other toxic air pollutants, fifty (50) pounds.

[45CSR13, R13-0936, 3.5.6; 45CSR§27-10.4.]

5.6. Compliance Plan

- 5.6.1. None.

6.0 Source-Specific Requirements [Boilers 830X and 831X]

6.1. Limitations and Standards

- 6.1.1 Each of the two (2) 97.9 MMBtu/hr steam boilers (Emission Unit ID # 830X and 831X) shall not exceed the following maximum emission rates by type of fuel combusted:

Pollutant	Maximum Emissions When Fired by:			
	Natural Gas		Distillate Oil	
	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Carbon Monoxide (CO)	8.06	35.40	3.34	14.50
Nitrogen Oxides (NO _x)	4.70	20.58	9.36	40.40
Particulate Matter ≤ 10μ (PM ₁₀)	0.91	4.00	1.51	6.60
Sulfur Dioxide (SO ₂)	0.06	0.30	4.75	20.50
Volatile Organic Compounds (VOC)	0.66	2.90	0.13	0.60

The above hourly particulate and sulfur dioxide emission limits shall demonstrate compliance with the less stringent hourly particulate and sulfur dioxide emission limits of 45CSR§2-4.1.b and 45CSR§10-3.1.e. **[45CSR13, R13-2560, 4.1.1, 4.1.9, and 4.1.13; 45CSR§2-4.1.b; 45CSR§10-3.1.e]**

- 6.1.2. The maximum amount of Distillate Oil (No. 1 Fuel Oil or No. 2 Fuel Oil) to be burned by a single boiler shall not exceed 658 gallons/hour or 5,763,000 gallons per year. The maximum amount of natural gas to be burned by a single boiler shall not exceed 97,900 cubic feet/hour or 858,000,000 cubic feet/year. **[45CSR13, R13-2560, 4.1.2]**
- 6.1.3. The only material to be stored in Tank T83-F01 (Distillate Fuel Oil Storage Tank) is Distillate Oil. The maximum throughput amount of Distillate Oil in Tank T83-F01 shall not exceed 11,526,000 gallons per year. **[45CSR13, R13-2560, 4.1.3]**
- 6.1.4. The maximum sulfur content of the Distillate Oil used to fire boilers 830X and 831X shall not exceed 0.05% sulfur by weight. Compliance with this maximum sulfur content limit for Distillate Oil shall demonstrate compliance with the less stringent 0.5% sulfur content limit of 40 C.F.R. §60.42c(d). **[45CSR13, R13-2560, 4.1.4 and 4.1.17 (b); 45CSR16; 40 C.F.R. §§60.42c(d) and 60.42c(i)]**
- 6.1.5. Compliance with all annual emission limits and throughput limits of 6.1.1, 6.1.2, and 6.1.3 shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of the specified emissions for the previous twelve (12) consecutive calendar months. **[45CSR13, R13-2560, 4.1.5]**
- 6.1.6. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. Compliance with the ten (10) percent opacity limit shall demonstrate compliance with the less stringent twenty (20) percent opacity limit of 40 C.F.R. §60.43c(c). **[45CSR13, R13-2560, 4.1.7 and 4.1.17(c); 45CSR§2-3.1; 45CSR16; 40 C.F.R. §60.43c(c)]**

- 6.1.7. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source. **[45CSR13, R13-2560, 4.1.12; 45CSR§2-9.2]**
- 6.1.8. If US EPA has not already promulgated a standard pursuant to 40 C.F.R. 63 for industrial, commercial, institutional boilers and process heaters, the facility shall submit a Part 1 112 (j) “equivalent emission limitation by permit” application for case-by-case MACT determination, containing the information required in 40 C.F.R. §63.53(a), within thirty (30) days of the date for a final rule specified in the final order of the United States District Court for the District of Columbia, which is currently February 21, 2011 ~~December 16, 2010~~. The Part 1 112(j) application shall identify each affected unit, and address HAP emissions from each of the boilers and process heaters. If the facility determines there are no affected units (boilers or process heaters), a statement of non-applicability must be submitted in lieu of a Part 1 application. A Part 2 112(j) “equivalent emission limitation by permit” application for case-by-case MACT determination containing information required in 40 C.F.R. §63.53(b) is due within 60 days of the Part 1 112(j) application submittal. All 112(j) “equivalent emission limitation by permit” applications must be submitted to both WVDEP - Division of Air Quality, and Chief of Permits and Technical Branch, US EPA Region III, Mail Code 3AP11, 1650 Arch Street Philadelphia, PA, 19103-2029. **[45CSR34; 40 C.F.R. §63.52]**

6.2. Monitoring Requirements

- 6.2.1. For the purpose of determining compliance with the opacity limits of 45CSR§§2-3.1 and 3.2, the permittee shall conduct visible emission checks or opacity monitoring and recordkeeping for emission points and equipment subject to an opacity limit.

Monitoring shall be conducted initially at least once per month with a maximum of forty-five (45) days between consecutive readings. After three consecutive monthly readings in which no visible emissions are observed from any of the subject emission points, those emission points will be allowed to conduct visible emission checks or opacity monitoring once per calendar quarter. If visible emissions or opacity are observed during a quarterly monitoring from any emission point(s), then that emission point(s) with observed emissions or opacity shall be required to revert to monthly monitoring. Any emission point that has reverted to monthly monitoring shall be allowed to again conduct quarterly visible emission checks or opacity monitoring only after three consecutive monthly readings in which no visible emissions are observed from the subject emission point.

These checks shall be conducted by personnel trained in the practices and limitations of 40 C.F.R. 60, Appendix A, Method 9 or Method 22, or 45CSR7A, during periods of normal operation of emission sources that vent from the referenced emission point(s) for a sufficient time interval to determine if there is a visible emission. For observations of visible emissions from any emission point(s) which follows a water scrubber, when condensed water vapor is present in the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which condensed water vapor is no longer visible; the observer shall record the approximate distance from the emission outlet to the point in the plume at which the observations are made.

If visible emissions are identified during the visible emission check, or at any other time regardless of operations, the permittee shall conduct an opacity reading using the procedures and requirements of 40 C.F.R. 60, Appendix A, Method 9 within seventy-two (72) hours of the first signs of visible emissions. A 40 C.F.R. 60, Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected within seventy-two (72) hours after the visible emission and the sources are operating at normal conditions.

[45CSR13, R13-2560, 4.1.8 and 4.2.1; 45CSR§2-3.2; 45CSR16; 40 C.F.R. §60.45c(a)]

6.3. Testing Requirements

- 6.3.1. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted tests to determine the compliance of such unit(s) with the emission limitations of 45CSR§2-4.1.b. Such tests shall be conducted in accordance with the appropriate method set forth in 45CSR2A or other equivalent EPA approved method approved by the Director. The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. Sufficient information on temperatures, velocities, pressures, weights and dimensional values shall be reported to the Director, with such necessary commentary as he may require to allow an accurate evaluation of the reported test results and the conditions under which they were obtained. **[45CSR13, R13-2560, 4.1.10; 45CSR§§2-8.1.b and 8.1.b.1]**
- 6.3.2. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in 45CSR§2-4.1.b. **[45CSR§2-8.1.c]**
- 6.3.3. When requested by the Secretary, tests to determine compliance with the CO, NO_x, PM₁₀, SO₂, and VOC emission limitations set forth in 6.1.1 shall be conducted in accordance with the test methods specified below and as set forth in 40 C.F.R. 60, Appendix A. The Secretary may approve an alternative test method(s) in light of any technology advancements that may occur.

Pollutant	Test Method
CO	10 or 10B
NO _x	7, 7A, 7B, 7C, 7D, or 7E
PM	5 or 5D
SO ₂	6, 6A, 6B, or 6C
VOC	25 or 25A

[45CSR13, R13-2560, 4.3.1]

6.4. Recordkeeping Requirements

- 6.4.1. The permittee shall record for each boiler (830X and 831X) the monthly hours of operation, the monthly fuel usage by fuel type, and shall compile twelve (12) month rolling totals for hours of operation and fuel usage by fuel type for each boiler. In addition, the permittee shall also maintain the date and time of start-up and shutdown for each boiler, and the start and end dates and times along with the duration of all periods of boiler malfunctions. These records shall be maintained on site for a period of no less than five (5) years. Certified records shall be made available to the Director or a duly authorized representative of the Director upon request, using the "Certification of Data Accuracy Statement" attached to R13-2560E. **[45CSR13, R13-2560, 4.1.11, 4.1.17 (d) and (e), 4.4.4, and 4.4.7; 45CSR16; 40 C.F.R. §§60.48c(g) and 60.7(b); 45CSR§§2-8.3.c and 8.3.d]**
- 6.4.2. To determine compliance with 6.1.3 and 6.1.4, the permittee shall monitor and maintain records of the Tank T83-F01 monthly throughput. In addition, the permittee shall obtain a certified record from the fuel supplier stating the sulfur content of the No. 2 Fuel Oil. Fuel supplier certifications shall include the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 C.F.R. §60.41c. Distillate oil as defined by 40 C.F.R. §60.41c means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials

in ASTM D396-78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils." These records shall be maintained on site for a period of not less than five (5) years. Certified records shall be made available to the Director or a duly authorized representative of the Director upon request, using the "Certification of Data Accuracy Statement" attached to R13-2560E. **[45CSR13, R13-2560, 4.1.17(a) and (b), 4.4.5, 4.4.6, and 4.4.7; 45CSR16; 40 C.F.R. §§60.42c(h)(1), 60.48c(f)(1), and 60.41c]**

- 6.4.3. Records of each visible emission observation and each Method 9 evaluation conducted in accordance with 6.2.1. shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request. The visible emission observation records shall include, but not be limited to, the date, time, name of the emission unit, the applicable visible emissions requirements, the results of the observations, what action(s), if any, was/were taken, and the name of the observer. **[45CSR§30-5.1.c.]**

6.5. Reporting Requirements

- 6.5.1. The permittee shall submit reports each six-month period of the fuel supplier certification records required to be maintained in 6.4.2. All reports shall be postmarked by the 30th day following the end of the reporting period.

These reports shall also include the following:

- a) The calendar dates covered in the reporting period;
- b) A certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

[45CSR16; 40 C.F.R. §§60.48c(d), (e)(1) and (11), f(1), and (j)]

6.6. Compliance Plan

- 6.6.1. None.

7.0 **Source-Specific Requirements [Emergency Diesel Engines 65BL, E02E, E03E, E04E]**

7.1 **Limitations and Standards**

7.1.1. Pursuant to 40 CFR 63, Subpart ZZZZ, *National Emission Standards For Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)*, the facility's existing and new stationary engines are subject to the following limitations and standards:

7.1.1.1. § 63.6590 What parts of my plant does this subpart cover?

In accordance with 40 C.F.R. §63.6590(c), an affected source that is a new or reconstructed stationary RICE which is an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP must meet the requirements of this part by meeting the requirements of 40 CFR part 60 Subpart IIII for compression ignition engines. No further requirements apply for such engines under this Part 63.

[45CSR34; 40 C.F.R. 63 Subpart ZZZZ §63.6590(c)] (E04E)

7.1.1.2. § 63.6595 When do I have to comply with this subpart?

If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

[45CSR34; 40 C.F.R. 63 Subpart ZZZZ §63.6595(a)(1)] (65BL, E02E, E03E)

7.1.1.3. The permittee must apply for the permit modification to include all the applicable requirements of the 40 CFR 63, Subpart ZZZZ, within 180 days prior to the compliance date above.

[45CSR§30-12.7] ((65BL, E02E, E03E)

7.1.2. Pursuant to 40 CFR 60, Subpart IIII - *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, the owner or operator must comply with the following applicable requirements for its new stationary engine (E04E):

7.1.2.1. §60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

<u>Maximum engine power</u>	<u>Model year(s)</u>	<u>NMHC + NOX</u> <u>g/KW-h (g/HP-hr)</u>	<u>CO</u> <u>g/KW-h (g/HP-hr)</u>	<u>PM</u> <u>g/KW-h (g/HP-hr)</u>
<u>130≤KW<225 (175≤HP<300)</u>	<u>2009 +</u>	<u>4.0 (3.0)</u>	<u>=</u>	<u>0.20 (0.15)</u>

[45CSR16; 40 C.F.R. 60 Subpart IIII §60.4205(c); Table 4 to Subpart IIII]

7.1.2.2. §60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

Beginning October 1, 2010, owners and operators of stationary CI RICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

[45CSR16; 40 C.F.R. 60 Subpart III §60.4207(b)]

7.1.2.3. §60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

[45CSR16; 40 C.F.R. 60 Subpart III §60.4211(a)]

7.1.2.4. If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(b) or § 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), or § 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

[45CSR16; 40 C.F.R. 60 Subpart III §60.4211(c)]

7.1.2.5. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under § 60.4205 but not § 60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

[45CSR16; 40 C.F.R. 60 Subpart III §60.4211(e)]

7.2. Monitoring Requirements

7.2.1. If you are an owner or operator of an emergency stationary CI internal combustion engine subject to 40 C.F.R. §60 Subpart III, you must install a non-resettable hour meter prior to startup of the engine.

[45CSR16; 40 C.F.R. 60 Subpart III §60.4209(a)] (E04E)

7.3. Testing Requirements

7.3.1. None.

7.4. Recordkeeping Requirements

7.4.1. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. [45CSR16; 40 C.F.R. 60 Subpart III §60.4214(b)] (E04E)

7.4.2. To demonstrate compliance with the 40 C.F.R. 60 Subpart III §60.4211(e) (requirement 7.1.2.5), the permittee shall maintain records of the hours of operation of the emergency stationary ICE for each calendar year. The owner must record the time of operation and shall state whether the emergency stationary ICE operating hours were for maintenance checks/readiness testing or for emergency operations. [45CSR§30-5.1.c.] (E04E)

7.5. Reporting Requirements

7.5.1. None.

7.6. Compliance Plan

7.6.1. None.